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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/971,985	10/04/2001	Casey Prindiville	6047-61246	4109

7590 10/28/2003

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EXAMINER

NORRIS, JEREMY C

ART UNIT	PAPER NUMBER
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2827

DATE MAILED: 10/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/971,985	PRINDIVILLE ET AL.	
	Examiner	Art Unit	
	Jeremy C. Norris	2827	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 19, 20 and 24-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 19, 20 and 24-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>3, 10-03</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

This application appears to be a division of Application No. 09/590,023, filed 7 June 2000. A later application for a distinct or independent invention, carved out of a pending application and disclosing and claiming only subject matter disclosed in an earlier or parent application is known as a divisional application or "division." The divisional application should set forth only that portion of the earlier disclosure, which is germane to the invention as claimed in the divisional application.

Specification

The abstract of the disclosure is objected to because of the use of the phrase "are provided". Correction is required. See MPEP § 608.01(b). Examiner suggests simple deletion.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 25 and 26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 25 recites the limitation "the cover member" in line 1 of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim 26 recites the limitation "the cover member" in line 1 of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 19, 20, and 24-29 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5,723,907 (hereafter Akram).

Akram discloses, referring to figure 4, a support element for a semiconductor package (12), the support element comprising: (a) a first surface having a plurality of conductors (22); (b) a second surface having a plurality of die attach areas, wherein at least one of the die attach areas (32x) comprises a defective die attach area; (c) the die attach areas including wire bond slots (20) extending from the first surface to the second surface of the support element so as to form openings there through; and (d) a cover member (50) attached to the at least one defective die attach area so as to cover at least a portion of the wire bond slot, wherein the cover member does not comprise a functional die (50 is a layer of adhesive or an adhesive tape, see col. 6, lines 5-10) [claim 1], wherein the cover member comprises self-adhesive tape (see col. 6, lines 5-10) [claim 2], wherein the cover member comprises a defective die (see col. 5, lines 60-68) [claim 3], wherein the cover member covers from about 80% to about 90% of the wire bond slot [claim 4], wherein the cover member covers at least 70% of an opening formed by the wire bond slot [claim 5].

Similarly, Akram discloses, referring to figure 4, a support element for a semiconductor package, the support element comprising: (a) a first surface having a plurality of conductors (22); (b) a second surface having a plurality of die attach areas, wherein at least one of the die attach areas (32x) comprises a defective die attach area; (c) the die attach areas including wire bond slots (20) extending from the first surface to the second surface of the support element so as to form openings there through; and (d) a cover member (50) attached to the at least one defective die attach area so as to cover enough of the opening formed by the wire bond slot so as to substantially eliminate bleeding when the support element is encapsulated, wherein the cover member does not comprise a functional die [claim 19], wherein the cover element does not cover enough of the opening so as to cause a negative pressure zone at the wire bond slot when the support element is encapsulated with a liquid plastic (see col.6, lines 40-45) [claim 20].

Additionally, Akram discloses, referring to figure 4, a support element for a semiconductor package, the support element comprising: (a) a first surface having a plurality of conductors (22); (b) a second surface having a plurality of die attach areas, wherein at least one of the die attach areas (32x) comprises a defective die attach area; (c) the die attach areas including wire bond slots (20) extending from the first surface to the second surface of the support element so as to form openings there through ; and (d) a defective die attached to the at least one defective die attach area so as to cover at least a portion of the wire bond slot [claim 24], wherein the cover member comprises heat-sensitive tape (50) covering a majority of an opening formed by a wire bond slot

[claim 25], wherein the cover member comprises a defective die covering from about 80% to about 90% of an opening formed by a wire bond slot [claim 26].

Also, Akram discloses, referring to figure 4, a support element for a semiconductor package, the support element comprising: (a) a first surface having a plurality of conductors (22); (b) a second surface having a plurality of die attach areas, wherein at least one of the die attach areas (32x) comprises a defective die attach area; (c) the die attach areas including wire bond slots (20) extending from the first surface to the second surface of the support element so as to form openings there through; and (d) tape(50) attached to the at least one defective die attach area so as to cover at least a portion of the wire bond slot [claim 27].

Furthermore, Akram discloses, referring to figure 4, a substrate of a support element, the substrate comprising: (a) a first surface having a pattern of conductors (22); (b) a second surface having a die attach area with defective electrical circuitry; (c) a wire bond slot (20) forming an opening through the substrate extending from the first surface to the second surface; and (d) a defective die (32x) attached to the substrate on the second surface so as to cover at least a portion of the wire bond slot [claim 28].

Moreover, Akram, discloses, referring to figure 4, a support element for a semiconductor package, the support element comprising: (a) a first surface having a plurality of conductors (22); (b) a second surface having a plurality of die attach sites, wherein a first die attach site is defective and a second die attach site is functional; (c) a plurality of integrally connected substrates formed by the first and second surfaces; and (d) the substrates including wire bond slots (20) extending from the first surface to the

second surface of the support element so as to form openings there through, wherein there is at least one opening formed at the first and the second die attach sites; (e) a cover member (50) attached to the first die attach site so as to cover from about 70% to about 100% of the opening [claim 29].

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

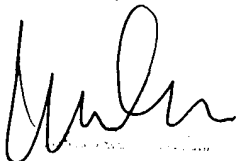
US 6,301,121 Lin,

US 6,489,218 Kim et al..

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeremy C. Norris whose telephone number is 703-306-5737. The examiner can normally be reached on Tuesday - Friday, 10am - 7pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamand Cuneo can be reached on 703-308-1233. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.



Jeremy C. Norris
SUPERVISOR, EXAMINER
TECHNICAL FIELD (2827)

JCSN